

KCNJ11 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP9209a

Specification

KCNJ11 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q14654</u>

KCNJ11 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 3767

Other Names

ATP-sensitive inward rectifier potassium channel 11, IKATP, Inward rectifier K(+) channel Kir62, Potassium channel, inwardly rectifying subfamily J member 11, KCNJ11

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9209a was selected from the N-term region of human KCNJ11. A

10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KCNJ11 Antibody (N-term) Blocking Peptide - Protein Information

Name KCNJ11

Function

Inward rectifier potassium channel that forms the pore of ATP-sensitive potassium channels (KATP), regulating potassium permeability as a function of cytoplasmic ATP and ADP concentrations in many different cells (PubMed:29286281, PubMed:34815345). Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. Can be blocked by extracellular barium (By similarity). In pancreatic cells, it forms KATP channels with ABCC8/SUR1 (PubMed:<a



href="http://www.uniprot.org/citations/29286281" target="_blank">29286281, PubMed:34815345). Can form cardiac and smooth muscle-type KATP channels with ABCC9.

Cellular Location Membrane; Multi-pass membrane protein.

KCNJ11 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

KCNJ11 Antibody (N-term) Blocking Peptide - Images

KCNJ11 Antibody (N-term) Blocking Peptide - Background

ATP-sensitive potassium (K(ATP)) channels are found in endocrine cells, neurons and both smooth and striated muscle, where they play an important role in controlling insulin secretion and vascular tone, and protect neurons under metabolic stress. Kir6.2 is a member of the inward rectifier potassium channel family, which is characterised by a greater tendency to allow potassium flow into the cell rather than out of it. It associates with the sulphonylurea receptor SUR1/ABCC8 to form a subfamily of K(ATP) channels that, when mutated or misregulated, are associated with forms of hyperinsulinemic hypoglycemia, neonatal diabetes, or pre-disposition to type 2 diabetes mellitus.